## CHAPTER 3.0 TRAFFIC IMPROVEMENT RECOMMENDATIONS

The FHWA report, *Analysis of Transportation Conditions After Traffic Restriction and Street Modifications in the Vicinity of the White House*, made several recommendations that could further improve traffic flow in the extended study area. These recommendations, although beyond the control of the Department of the Treasury, are provided for consideration by the relevant District of Columbia offices which have the legal authority to implement them. They are presented below as transportation and parking recommendations.

## 3.1 Transportation

The FHWA report recommended a comprehensive transportation planning study of downtown Washington. This recommendation prompted discussion of Washington's transportation needs and led to the initiation of the development of a Strategic Action and Investment Program to assist the District of Columbia by identifying transportation investments and operational improvements that should be made in the next six years throughout the District. The program is being developed under the combined guidance of the DCDPW and the FHWA and is intended to implement the District of Columbia's long-range state transportation plan, *A Vision and Transportation Strategy for the Nation's Capital*. The Strategic Action and Investment Program is designed to respond to several factors, one of which is the continuing changes in the District's street, highway, and parking systems resulting from increased emphasis on safety and security for federal buildings and workers. High-priority transportation actions are to be identified by August 1997.

The FHWA analysis produced an immediate-action program to improve transportation conditions. The immediate-action program is presented here, but its relationship to the security action is limited in two ways. First, the immediate-action improvements would address both the negative transportation effects of the security action and problems that existed before the action. The relationship between the immediate-action program and the security action cannot be measured because of the lack of data on conditions before the security action. Second, the objective of the immediate-action program was to improve transportation conditions, not to address environmental issues. In spite of those limitations, the immediate-action improvements are presented in this EA because they would enhance transportation conditions in the extended study area. As noted in the following descriptions, improvements have already been made in some areas by the DCDPW as a result of the earlier analysis.

- 1. <u>20th Street at K Street</u> Prohibit on-street parking on both sides of 20th Street within 100 feet south of K Street to provide additional travel lanes. This would reduce the northbound traffic back-ups on 20th Street, which now extend to I Street. This action would remove up to six parking spaces.
  - Action for consideration
- 2. <u>19th Street at Pennsylvania Avenue</u> Remove existing traffic signs and replace them with signs that match the present left-turn lane configuration in the northwest and southwest quadrants of the intersection. Add pavement-marking extensions for left-turn movements from Pennsylvania Avenue to channelize traffic better.
  - · DCDPW has completed sign changes
  - · Pavement markings action for consideration
- 3. H Street at Pennsylvania Avenue Reconfigure the raised triangular traffic island in H Street east

of the intersection to create a third lane on the north side of the island and to prevent left turns from Pennsylvania Avenue. All east-bound traffic traveling from Pennsylvania Avenue onto H Street should do so at the intersection with 19th Street. This action would reduce congestion on H Street, where eastbound traffic is impeded by traffic queues at a parking garage entrance, and would avoid traffic back-ups on Pennsylvania Avenue caused by traffic making left turns east of 19th Street.

- Action under contract by DCDPW
- 4. <u>Connecticut Avenue at K Street</u> Change left-turn restrictions to reduce traffic back-ups on K Street through the intersection. There are three options for this action: (1)Prohibit left turns from eastbound K Street to northbound 17th Street, the next intersection east, as left-turning traffic at this intersection backs up through the Connecticut Avenue intersection; (2) Prohibit left turns from southbound Connecticut Avenue to eastbound K Street. Move Metrobus left turns from Connecticut Avenue to L Street. From L Street, Metrobuses would turn right onto 17th Street to continue south; or, (3) Prohibit left turns, except for Metrobuses, from southbound Connecticut Avenue to eastbound K Street. Any one of these options would improve pedestrian safety and increase vehicular capacity at Connecticut Avenue and K Street, which are now affected by traffic that backs up from the next intersection east at 17th Street. Before the action, left turns were prohibited at 17th Street.
  - · Action taken by DCDPW (Items 1 and 2)
  - · Metrobus action for consideration
- 5. <u>K Street at 17th Street (East)</u> Move the commuter bus stop from the south side of K Street at Farragut Square to some other location along K Street, to be agreed upon by the bus operator. This action would improve traffic flow on K Street during morning and afternoon peak periods.
  - · Action for consideration
- 6. <u>E Street between 15th and 17th Streets</u> Allow two-way public vehicular traffic on E Street between 15th and 17th Streets to increase the east-west street capacity in the extended study area, which is now inadequate. The most significant change in this action would be to introduce two-way traffic to E Street between South Executive Avenue and 17th Street, which carried only one-way traffic before the vehicular traffic restriction. Two-way traffic would be returned to E Street between 15th Street and South Executive Avenue, as was previously allowed. Traffic would continue to be restricted from South Executive Avenue and State Place. The United States Secret Service security control on South Executive Avenue would be unaffected. To accommodate two-way traffic, E Street between 15th Street and 17th Street would require modifications to include, among other things, a secure access lane running along the north side of E Street from 15th Street to the southwest security control point located at South Executive Avenue and E Street.
  - · Action for consideration
- 7. <u>17th Street between Pennsylvania and New York Avenues</u> Increase southbound traffic capacity by removing on-street parking next to the Old Executive Office Building and re-striping 17th Street between Pennsylvania and New York Avenues. This action would improve accommodation of the 1,500 vehicles that travel southbound on this section in the p.m. peak hour, 500 of which turn right at New York Avenue. There are two options for this action. One is the re-striping described above in the discussion of E Street. The other would be to create a reversible center lane on 17th Street that would provide three lanes in one direction and two in the other, depending upon the time period.

- · Action for consideration
- 8. <u>Connecticut Avenue at H Street</u> Reduce the number of southbound travel lanes on Connecticut Avenue between H and I Streets from four to three in the morning peak period by removing the parking restriction on the west side of the avenue. This action would reduce congestion caused by the present lane discontinuity that exists in the morning; four southbound lanes of traffic on Connecticut Avenue must all turn left into three lanes on H Street. Parking is allowed in 16 on-street spaces during other times of the day; it should also be allowed in the morning peak period.
  - Action taken by DCDPW
- 9. <u>15th Street (West)/Vermont Avenue at I Street</u> Remove the right-turn signal for westbound-I Street-to northbound-15th Street turns, and allow right turns on the green signal. This action would reduce the queue of right-turning traffic that frequently extends to the adjacent intersection at 15th Street (East). The separate right-turn signal allows an exclusive pedestrian phase for pedestrians crossing 15th Street north of I Street. This is unnecessary, as the volume of pedestrians in the morning, midday, and afternoon peak periods is lower than the 300 pedestrians per hour needed to warrant an exclusive pedestrian phase.
  - Action taken by DCDPW
- 10. <u>15th Street between New York Avenue/Pennsylvania Avenue and K Street</u> Convert 15th Street between New York Avenue/Pennsylvania Avenue and K Street to two-way operation with one or two lanes in each direction except during the morning peak period when it should continue to operate as a one-way northbound street. Modify signals, signs, striping, and parking restrictions to accommodate two-way traffic. This action would relieve congestion on 14th Street. Fifteenth Street now operates well for northbound traffic, but 14th Street is congested because it now carries some of the southbound traffic that previously used 15th Street. Returning two-way traffic to 15th Street would resolve this problem. It would not reduce the number of parking spaces on 15th Street.
  - Action taken by DCDPW to make 15th Street two-way between New York Avenue/Pennsylvania Avenue and H Street
- 11. <u>15th Street (East)/Vermont Avenue at K Street</u> Designate the center northbound lane on the south approach to the intersection as a through-left optional lane. Modify pavement markings and signs to clearly instruct motorists. This action would avoid confusion and provide for left turns at all hours.
  - Action taken by DCDPW
- 12. 14th Street at H Street Remove the five metered parking spaces that occupy the exclusive eastbound left-turn lane on H Street. This action would reduce the impedance for traffic turning left from eastbound H Street to northbound 14th Street at off-peak times. At present, parking is prohibited in these spaces during morning and afternoon peak periods, but volumes are also high at other times. Adjust signal timing and progression to allow southbound 14th Street between H Street and New York Avenue to accept traffic turning right from H Street. This would reduce the impedance created by vehicles queued at New York Avenue. Better enforcement of the parking restrictions in the block of southbound 14th Street between H Street and New York Avenue would also improve traffic flow. If 15th Street were converted to two-way operation, the need for this change would be lessened.
  - Action taken by DCDPW

- 13. <u>H Street at New York Avenue</u> Re-time signals to provide more green time for eastbound traffic on H Street. This action would reduce the queuing of vehicles on H Street approaching New York Avenue, where traffic now sometimes backs up to 14th Street. Reconfigure the traffic islands on the west side of the intersection to create more capacity for traffic turning left from H Street onto eastbound New York Avenue. This action would further enhance the operation of the intersection and reduce queuing. Relocate the traffic island in H Street on the east side of the intersection to create three lanes on the south side of the island and two on the north side. Increasing the number of acceptance lanes on the south side of the island to three will improve the flow of through traffic on H Street.
  - Action under contract by DCDPW
- *H* and *I* Streets Remove and relocate signs associated with previous traffic patterns and bus operations.
  - Action taken by DCDPW
- 15. <u>Extended Study Area</u> The FHWA transportation analysis recommended that traffic signal timing throughout downtown Washington be analyzed and revised where appropriate. It noted that signal timing would need to be changed at locations where immediate-action program improvements were made to respond to the vehicular traffic restriction. The Strategic Action and Investment Program is addressing this recommendation by including analysis of the need for traffic signal timing along with other transportation improvements. The DCDPW is about to begin an integrated transportation management system project that will replace the present signal system with one that is more responsive to traffic volumes. Improving traffic signal timing will not only provide better traffic flow, it will also improve air quality by reducing motor vehicle idling at intersections.
  - Action under contract by FHWA

## 3.2 Parking

The FHWA transportation analysis identified a number of locations where parking meters could be installed to offset the loss in revenue to the District of Columbia resulting from the 49 meters removed on these streets. Those include:

- **On 15th Street between I and K Streets** A bus stop removed from the west block face provided room for 11 more parking spaces with meters.
- **On I Street between 13th and 14 Streets** Meters were unnecessarily removed at 4 locations, and poles remained at the time of the analysis. These meters could be replaced.
- On I Street between Connecticut Avenue and 17th Street A relocated bus stop provided room for 3 more spaces with parking meters.
- **On H Street between 18th and 17th Streets** A relocated bus stop on the north block face provided room for 12 more spaces with meters.
- **On H Street between Vermont Avenue and 15th Street** A relocated bus stop from the north block face to the south block face provided room for 4 spaces on the north block face. The space

allocated for the new bus stop on the south block face could provide one additional parking space with meter on the south block face.

• **On H Street between 14th and 13th Streets/New York Avenue** - Relocation of a bus stop from the north block face provides room for 4 more spaces with meters on the north block face.

Institution of these changes would serve to mitigate some of the lost revenue to the District of Columbia and would also serve to restore some of the lost parking to people visiting the area. The DCDPW Parking Administration has been working with WMATA to organize and establish bus stops and meter locations to coordinate space utilization.